

## AVANTHI INSTITUTE OF ENGINEERING AND TECHNOLOGY

(Approved by AICTE, Permanently Affiliated to JNT University Kakinada,  
Accredited by NAAC and Recognized under 2(f) & 12 (b) by UGC, New Delhi)  
Tamaram, Makavarapalem, Narsipatnam (RD),  
Visakhapatnam-53111



*Certificate Course  
on*

*Machine Learning*

*From 7<sup>th</sup> February 2022 to 12<sup>th</sup> February 2022*



**MACHINE LEARNING**

**ORGANIZED BY**

**DEPT. OF COMPUTER SCIENCE AND ENGINEERING  
AVANTHI INSTITUTE OF ENGINEERING AND TECHNOLOGY,  
MAKAVARAPALEM (V), VISAKHAPATNAM-531113**

## AVANTHI INSTITUTE OF ENGINEERING & TECHNOLOGY



AIET started in the year 1999 and offers various courses at Engineering and PG level. The college is providing with rooms, computer centre, laboratories and seminar hall with audio-visual equipments. Industry Institute interaction is conducted regularly to emphasize on the latest trends in the present market.

It is very near to Narsipatnam. Frequent bus facilities are available both from and to Visakhapatnam and Narsipatnam. Very safe and secure hostel facility is available for Girl students. These are the additional facilities besides excellent academic atmosphere in the college campus.

### DEPARTMENT OF COMPUTER SCIENCE ENGINEERING

The Computer Science & Engineering department was established with B.Tech Program in 1999 with intake of 60 students and this was increased to 120 students in 2007 and increased to 180 students in 2012. The Post graduate Program M.Tech with C.S.E was started in 2005 with intake of 18 Students and this was increased to 24 students in 2012. The Computer Science & Engineering department was accredited by NBA in 2009 and 2014. Department mission is to be Instrumental in the field of computer science &

engineering by providing high quality education and continues improvement process of the program. The department has full fledged faculty with four professors with Ph.D and 40 staff members with experience in teaching and industry, which leads the skill students to get employment in the market. . The department encourages the faculty members and the students to participate paper presentations, seminars, workshops and National, International conferences and research activities. The department is well equipped laboratories and the computers have sophisticated development software tools. The department provides training to its students in advanced technologies like JAVA, WEB TECHNOLOGIES,.NET, PHP, Data Warehousing, Data Mining tools and Data storage systems as a supplement to the curriculum to enhance the employability of students.Our faculty members are the members of Computer Science of India,ISTF,IEEE

## **ABOUT COURSE**

Machine learning is an application of artificial intelligence that involves algorithms and data that automatically analyse and make decision by itself without human intervention. It describes how computer perform tasks on their own by previous experiences. Therefore we can say in machine language artificial intelligence is generated on the basis of experience.analysis as it can automatically identify the structure in data containing sets of examples.This type of algorithm consists of input data without labelled response. There will not be any pre existing labels and human intervention is also less. It is mostly used in exploratory data.

The difference between normal computer software and machine learning is that a human developer hasn't given codes that instructs the system how to react to situation, instead it is being trained by a large number of Supervised learning is a technique where the program is given labelled input data and the expected output data. It gets the data from training data

## **Topics to be covered**

Day 1: Introduction to Machine Learning

Day 2: Supervised Learning and Linear Regression

Day 3: Classification and Logistic Regression

Day 4: Decision Tree and Random Forest, Introduction to Deep Learning

Day 5 : Naïve Bayes and Support Vector Machine, Time Series Analysis

Day 6 : Unsupervised Learning, Natural Language Processing and Text Mining

For Registration please contact Mr.V.Trinadh, Assistant Professor, CSE

### **CHIEF PATRON**

Smt.M.Gnaneswari  
President

Avanthi Institute of Engineering and Technology

### **PATRON**

Dr. C P V N J Mohan Rao  
Principal,

Avanthi Institute of Engineering and Technology

### **CHAIRMAN**

U.Nanaji  
Head of The Department  
Computer Science & Engineering



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Tamaram, Makavarapalem, Narsipatnam (RD), Visakhapatnam-531113

### **DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING**

#### **CIRCULAR**

Dt: 01-02-2022.

On behalf of the Department of Computer Science and Engineering, AIET is conducting one week certificate course on "Machine Learning" from 7<sup>th</sup> February 2022 to 12<sup>th</sup> February 2022 for all the students of II & IV year CSE. I advise to all the students of II & IV year CSE to enroll your details for above course. For more details, you may consult Course Coordinator Mr.V.Trinadh Assistant Professor, CSE

#### **Resource Person Details:**

1.Dr.A.Ramarao

Professor

Department of Computer Science and Engineering

LENDI Institute of Engineering and Technology, Jc nnada,

Vizianagaram

2.Dr.M.Ramesh

Professor

Department of Computer Science and Engineering

RVR & JC College of Engineering, Guntur

U. Nanaji

Head of the Department

Computer Science and Engineering

Copy to: Principal, AIET

**Avanthi Institute of Engg. & Technology**  
Tamaram, Makavarapalem Md.,  
Visakhapatnam District, PIN-531113



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Tamaram, Makavarapalem, Narsipatnam (RD), Visakhapatnam-531113

### Machine Learning

From 7<sup>th</sup> February 2022 to 12<sup>th</sup> February 2022

### SYLLBUS

Day 1: Introduction to Machine Learning

Day 2: Supervised Learning and Linear Regression

Day 3: Classification and Logistic Regression

Day 4: Decision Tree and Random Forest, Introduction to Deep Learning

Day 5 : Naïve Bayes and Support Vector Machine, Time Series Analysis

Day 6 : Unsupervised Learning, Natural Language Processing and Text Mining

Mr. V. Trinadh  
Coordinator

U. Nanaji

Head Of the Department

Avanthi Institute of Engineering & Technology  
Computer Science and Engineering  
Tamaram, Makavarapalem Rd  
Visakhapatnam District, Pin-531113





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### **Machine Learning**

**From 7<sup>th</sup> February 2022 to 14<sup>th</sup> February 2022**

#### **Schedule**

##### **DAY 1(7-2-2022)**

9.00 A.M – 1.00 P.M : Introduction to Machine Learning

1.00 P.M – 2.00 P.M : Lunch break

2.00 P.M – 4.00 P.M : Introduction to Machine Learning

##### **DAY 2(8-2-2022)**

9.00 A.M – 1.00 P.M : Supervised Learning

1.00 P.M – 2.00 P.M : Lunch break

2.00 P.M – 4.00 P.M : Linear Regression

##### **DAY 3(9-2-2022)**

9.00 A.M – 1.00 P.M : Classification

1.00 P.M – 2.00 P.M : Lunch break

2.00 P.M – 4.00 P.M : Logistic Regression

##### **DAY 4(10-2-2022)**

9.00A.M – 1.00 P.M : Decision Tree and Random Forest

1.00 P.M – 2.00 P.M : Lunch break

2.00 P.M – 4.00 P.M : Introduction to Deep Learning

##### **DAY 5(11-2-2022)**

9.00 A.M – 1.00 P.M : Naïve Bayes and Support Vector Machine

1.00 P.M – 2.00 P.M : Lunch break

2.00 P.M – 4.00 P.M : Time Series Analysis

**DAY 6(12-2-2022)**

9.00 A.M – 1.00 P.M : Unsupervised Learning

1.00 P.M – 2.00 P.M : Lunch break

2.00 P.M – 4.00 P.M : Natural Language Processing and Text Mining



Mr.V.Trinadh  
Coordinator



U.Nanaji

Head Of the Department

Computer Science and Engineering

Avanthi Institute of Engg & Technology  
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### Machine Learning

Dated : 07/02/2022 To 12/02/2022

### II & IV B.Tech Students Attendance List

S.No	Roll No	Name of the student	DAY 1	DAY 2	DAY 3	DAY 4	DAY 5	DAY 6
1	18811A0501	BAILAPUDI PADMA	✓	✓	✓	✓	✓	✓
3	18811A0503	BODDAPU PRASAD	✓	✓	✓	✓	✓	✓
4	18811A0504	BODDEDA LOKESH	✓	✓	✓	✓	✓	✓
6	18811A0506	BONTHU PRANAY	✓	✓	X	✓	✓	✓
7	18811A0507	DACHEPALLI VENKATA VIJAYALAKSHMI	✓	✓	✓	✓	✓	✓
9	18811A0509	DIVYA BISAI	✓	✓	✓	✓	✓	✓
10	18811A0510	DUGGINENI UMESH CHANDRA	✓	✓	✓	✓	X	✓
12	18811A0512	GANDI BHARDWAZ NAIDU	✓	✓	✓	✓	✓	✓
13	18811A0513	GOGINENI ALEKHYA	✓	✓	✓	✓	✓	✓
15	18811A0515	GOLTI SAI KOTI MEGHANA	✓	✓	✓	✓	✓	✓
17	18811A0517	GOPINAYAKA HEMA	✓	✓	✓	✓	✓	✓
18	18811A0518	GORLA ABHISHEK	✓	✓	✓	✓	✓	✓
19	18811A0519	GORLE SRI SATYA	✓	✓	✓	✓	✓	✓
21	18811A0521	GURE CHANDRIKA	✓	✓	✓	✓	✓	✓
22	18811A0522	GURRAM BHARGAVI	✓	✓	✓	✓	✓	✓
24	18811A0524	IMANDI RUBIN PRINCE	✓	✓	✓	✓	✓	✓
26	18811A0526	K VASANTHA	✓	X	✓	✓	✓	✓
28	18811A0528	KADAVALA SAI PRIYA	✓	✓	✓	✓	✓	✓
29	18811A0529	KADIMISETTY MANIKANTA	✓	✓	✓	✓	✓	✓
31	18811A0531	KARAKAVALASA DHANALAKSHMI	✓	✓	✓	✓	✓	✓
32	18811A0532	KARANAM CHIRUCHAITANYA	✓	✓	✓	✓	✓	✓

33	18811A0533	KEERTHI TEJASWI	✓	✓	✓	✓	✓	✓
35	18811A0535	KOTARU JANI KRISHNA	✓	✓	✓	✓	✓	✓
36	18811A0536	KOTHAKOTA MAHESWARI	✓	✓	✓	✓	✓	✓
38	18811A0538	LAKKOJU SRAVAN KUMAR	✓	✓	✓	X	✓	✓
39	18811A0539	LALAM SASIPRIYA	✓	✓	✓	✓	✓	✓
41	18811A0541	MAJJI SAI LAKSHMI	✓	✓	✓	✓	✓	✓
42	18811A0542	MAJJI TULASI	✓	✓	✓	✓	✓	✓
43	18811A0543	MARISETTI MEENAKSHI	✓	✓	✓	✓	✓	✓
44	18811A0544	MEDISETTI JANAKI	✓	✓	✓	✓	✓	✓
46	18811A0546	PATHAKAMUDI SHARMILA	✓	✓	✓	✓	✓	✓
48	18811A0548	PENUGUNTLA DIWAKARA SWAMY	✓	✓	✓	✓	✓	✓
50	18811A0550	PITLA THANUSHA	✓	✓	✓	✓	✓	✓
51	18811A0551	POTHAMSETTI MANIKANTA	✓	X	✓	✓	✓	✓
52	18811A0552	REDDI ISHWARYA	✓	✓	✓	✓	✓	✓
54	18811A0554	SANIVARAPU BINDU SREE	✓	✓	✓	✓	✓	✓
55	18811A0555	SEERA SREELEKHA	✓	✓	✓	✓	✓	✓
56	18811A0556	SIDDABATTULA DURGA VENKATA SAI	✓	✓	✓	✓	✓	✓
58	18811A0558	SOOREDDY PAVAN KUMAR	✓	✓	✓	✓	✓	✓
60	18811A0560	T PRATYUSHA	✓	✓	✓	✓	✓	✓
61	18811A0561	TULURI SWAROOPA RANI	✓	✓	✓	✓	✓	✓
62	18811A0563	VILLURI SATYA SAI	✓	✓	✓	✓	✓	✓
64	18811A0565	WASHINGTON VINEET DANIEL	✓	✓	X	✓	✓	✓
65	18811A0566	YALAMANCHILI SAILATHA	✓	✓	✓	✓	✓	✓
67	18811A0568	YUVA PREMA SAI SANAPATHI	✓	✓	✓	✓	✓	✓
68	18811A0569	VEEROJU SAI PRASANNA	✓	✓	✓	✓	✓	✓
69	18811A0570	UDDAGIRI SAI KISHORE	✓	✓	✓	✓	✓	✓
70	18811A0571	VUTA GANA SUDHEER RAJU	✓	✓	✓	✓	✓	✓
71	19815A0501	IJJAPU GANESH	✓	✓	✓	X	✓	✓
72	19815A0502	KASIMAHANATHI TEJA	✓	✓	✓	✓	✓	✓
73	19815A0503	KILLADA RAVIKUMAR	✓	✓	✓	✓	✓	✓



74	19815A0504	MAPATHINA VAMSI KRISHNA	✓	✓	✓	✓	✓	✓
75	19815A0505	ADARI YASHODA VARAHA MANI VARMA	✓	✓	✓	✗	✓	✓
76	20811A0501	ADNALA MANJU	✓	✓	✓	✓	✓	✓
77	20811A0502	AMIRIPILLI ABHIRAM	✓	✓	✓	✓	✓	✓
78	20811A0503	AMPOLU VIJAYKUMAR	✓	✓	✓	✓	✓	✓
79	20811A0504	ANALA SREE CHARAN	✓	✓	✓	✓	✓	✓
80	20811A0505	ANEM HARIKISHORE	✓	✓	✓	✓	✓	✓
81	20811A0506	ANNEPU PAVANKALYAN	✓	✓	✓	✓	✓	✓
82	20811A0507	AVALA RAJA	✓	✓	✓	✓	✓	✗
83	20811A0508	BARRE ELISHA RAJU	✓	✓	✓	✓	✓	✓
84	20811A0509	BARRI SATISH KUMAR	✓	✓	✓	✓	✓	✓
85	20811A0510	BAYANA PRASANNA KUMAR	✓	✓	✓	✗	✓	✓
86	20811A0511	BEERA ANAND BABU	✓	✓	✓	✓	✓	✓
87	20811A0512	BELLAPUKONDA PAVANI	✓	✓	✓	✓	✓	✓
88	20811A0513	BHESETHI PRUDHVI GANESH	✓	✓	✓	✓	✓	✓
89	20811A0514	BOBBADI RAMYA GANGA	✓	✓	✓	✓	✓	✓
90	20811A0515	BODDEDA ALEKHYA DEVAKI	✓	✓	✓	✓	✓	✓
91	20811A0516	BODDEDA GOWRI	✓	✓	✓	✓	✓	✓
92	20811A0517	BODDEDA YESWANTH	✓	✓	✓	✓	✓	✓
93	20811A0518	BODDU BHANUPRASAD	✓	✗	✓	✓	✓	✓
94	20811A0519	BOLEM GUNA SEKHAR	✓	✓	✓	✓	✓	✓
95	20811A0520	BONGU HUNUMA SRI PUJITHA	✓	✓	✓	✓	✓	✓
96	20811A0521	BORRA MANIKYAM MADHAVI	✓	✓	✓	✓	✓	✓
97	20811A0522	BUGATHA DURGAPRASAD	✓	✓	✓	✓	✓	✓
98	20811A0523	CHADALAVADA BHARGAV	✓	✓	✓	✓	✓	✓
99	20811A0524	CHALLA NITISH	✓	✓	✗	✓	✓	✓
100	20811A0525	CHEBOLU CHANDU	✓	✓	✓	✓	✓	✓
101	20811A0526	CHIDIPOTHU MOHANARAO	✓	✓	✓	✓	✓	✓
102	20811A0527	CHIKKALA HEMA VARALAKSHMI	✓	✓	✓	✓	✓	✓

104	20811A0529	DESHMUK GANESH	✓	✓	✓	✓	✓	✓
105	20811A0530	DEVARA RUSHMA	✓	✓	✓	✓	✓	✓
107	20811A0532	DODDI GAYATHRI	✓	✓	✓	✓	X	✓
108	20811A0533	DWARAPUDI NAGA LAKSHMANA PRASANTH	✓	✓	✓	✓	✓	✓
109	20811A0534	GANDEPALLI DEEPTHI	✓	✓	✓	✓	✓	✓
110	20811A0535	GANISETTI PRASAD	✓	✓	✓	✓	✓	✓
111	20811A0536	GEDDADA ASHRITHA	✓	✓	✓	✓	✓	✓
113	20811A0538	GORLE DURGA PRASAD	✓	✓	✓	✓	✓	✓
114	20811A0539	GORLI SAI CHAITANYA	✓	✓	✓	✓	✓	✓
116	20811A0541	IPPILI SRAVANI	✓	✓	✓	✓	✓	✓
117	20811A0542	JETTI LAKSHMI	✓	✓	✓	✓	✓	✓
118	20811A0543	JONNADA LAKSHMI MANOJ	✓	✓	✓	✓	✓	✓
119	20811A0544	INDALI RAMALAKSHMI	✓	✓	✓	✓	✓	✓
120	20811A0545	KANDREGULA JYOSHNA	✓	✓	✓	✓	✓	✓
122	20811A0547	KARRI DIVYA	✓	✓	✓	X	✓	✓
123	20811A0548	KASIMKOTA NARESH	✓	✓	✓	✓	✓	✓
126	20811A0551	KONA MANASA	✓	✓	✓	✓	✓	✓
127	20811A0552	KOPPISETTI ANJALI	✓	✓	✓	✓	✓	✓
128	20811A0553	KOSURU NAGA DURGA NAVYASRI	✓	✓	✓	✓	✓	✓
130	20811A0555	KUBIREDDI BHARATHI	✓	✓	✓	✓	✓	✓
131	20811A0556	KURITI MOHINI	✓	✓	✓	✓	✓	✓
134	20811A0559	MAJJI SAI CHAKRAVARTHI	✓	✓	X	✓	✓	✓
135	20811A0560	MALLA CHANDU	✓	✓	✓	✓	✓	✓
136	20811A0561	MALLIREDDY NIKITHA	✓	✓	✓	✓	✓	✓
138	20811A0563	MARRAPU SAI NARENDRA	✓	✓	✓	✓	✓	✓
139	20811A0564	MEDEPALLI NIKHIL	✓	✓	✓	✓	X	✓
140	20811A0565	MISRO NARASIMHA	✓	✓	✓	✓	✓	✓
141	20811A4211	INDALA SRI VENKATA MANI PAVAN KUMAR	✓	✓	✓	✓	✓	✓

142	20811A4212	KALIMI DURGA PRASAD	✓	✓	✓	✓	✓	✓
143	20811A4213	KARRI AYYAPPA RAO	✓	✓	✓	✓	✓	✓
144	20811A4214	KARRI RAJKUMAR	✓	✓	✓	✓	✓	✓
145	20811A4215	KILLADA BHUVANESWARI	✓	✓	✓	X	✓	✓
146	20811A4216	LENKA KAVYA	✓	✓	✓	✓	✓	✓
147	20811A4217	MADEM LAKSHMI ROHITHA	✓	✓	✓	✓	✓	✓
148	20811A4218	NAGIREDDI YUVARAJ	✓	✓	✓	✓	✓	✓
149	20811A4219	NAVARA JAHNAVI LAHARI	✓	X	✓	✓	✓	✓



Coordinator

  
HOD

Anthi Institute of Engg. & Technology  
Tamaram, Makavarapalem Rd.,  
Visakhapatnam District, PIN-531113





# AVANTHI

## INSTITUTE OF ENGINEERING AND TECHNOLOGY

Tamaram (V), Makavarapalem (M), Visakhapatnam Dist. 531113.

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### *Certificate of Participation*

This is to certify that Mr./Ms. \_\_\_\_\_ of \_\_\_\_\_ has participated in the Certificate Course entitled on Machine Learning from 7<sup>th</sup> Feb 2022 to 12<sup>th</sup> Feb 2022 was organised by the Department of COMPUTER SCIENCE AND ENGINEERING at Avanathi Institute Of Engineering And Technology

**Coordinator**

**HOD**

**Principal**





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### DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

A Course On

Machine Learning

Dated: 7-2-2022



Coordinator

HOD

Avanthi Institute of Engg & Technology  
Tamaram, Makavarapalem Md  
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**Department of Computer Science and Engineering**

Dt: 31-12-2021

**BRIEF REPORT**

Department of Computer Science and Engineering, Avanthi Institute of Engineering and Technology had organized a certificate course on "Machine Learning" from 07-02-2022 to 12-02-2022.

We had Resource Person Dr.A.Rama Rao, Professor, Department of Computer Science and Engineering Lendi Institute of Engineering and Technology, Jonnada, Vizianagaram, was explained the types of machine learning algorithms differ in their approach, the type of data they input and output, and the type of task or problem that they are intended to solve. Broadly Machine Learning can be categorized into four categories. Supervised Learning, Unsupervised Learning, Reinforcement Learning, Semi-supervised Learning. Machine learning enables analysis of massive quantities of data. While it generally delivers faster, more accurate results in order to identify profitable opportunities or dangerous risks, it may also require additional time and resources to train it properly

We had Resource Person Dr.M.Ramesh, Professor, Department of Computer Science and Engineering, RVR & JC College of Engineering, Guntur explained about Advantages of Machine Learning that are Easily identifies trends and patterns, No human intervention needed (automation), Continuous Improvement, Handling multi-dimensional and multi-variety data, Wide Applications and disadvantages that are Data Acquisition, Time and Resources, Interpretation of Results, High error-susceptibility.

Coordinator

Avanthi Institute of Engg. & Technology  
Tamaram, Makavarapalem Md  
U. Nallaj  
Visakhapatnam District, Pin-531113  
Head of the Department  
Computer Science and Engineering